

TABLE A

Component assembly	Drawing No.
(i) Head Assembly	420-1000
(ii) Neck Assembly	420-2000
(iii) Upper Torso Assembly	420-3000
(iv) Lower Torso Assembly	420-4000
(v) Complete Leg Assembly—left	420-5000-1
(vi) Complete Leg Assembly—right	420-5000-2
(vii) Complete Arm Assembly—left	420-7000-1
(viii) Complete Arm Assembly—right	420-7000-2

(b) The structural properties of the dummy are such that the dummy conforms to this Subpart in every respect before use in any test.

§572.172 Head assembly and test procedure.

(a) The head assembly for this test consists of the complete head (drawing 420-1000), a six-axis neck transducer (drawing SA572-S11, included in drawing 420-0000), or its structural replacement (drawing 420-383X), and 3 accelerometers (drawing SA572-S4, included in drawing 420-0000) (all incorporated by reference, see §572.170).

(b) When the head assembly is dropped from a height of 376.0 ± 1.0 mm (14.8 ± 0.04 in) in accordance with paragraph (c) of this section, the peak resultant acceleration at the location of the accelerometers at the head CG may not be less than 250 G or more than 300 G. The resultant acceleration vs. time history curve shall be unimodal; oscillations occurring after the main pulse must be less than 10 percent of the peak resultant acceleration. The lateral acceleration shall not exceed 15 G (zero to peak).

(c) Head test procedure. The test procedure for the head is as follows:

(1) Soak the head assembly in a controlled environment at any temperature between 18.9 and 25.6 °C (66 and 78 °F) and a relative humidity from 10 to 70 percent for at least four hours prior to a test.

(2) Prior to the test, clean the impact surface of the skin and the impact plate surface with isopropyl alcohol, trichloroethane, or an equivalent. The skin of the head must be clean and dry for testing.

(3) Suspend and orient the head assembly as shown in Figure T1. The lowest point on the forehead must be 376.0

± 1.0 mm (14.8 ± 0.04 in) from the impact surface. The 1.57 mm (0.062 in) diameter holes located on either side of the dummy's head shall be used to ensure that the head is level with respect to the impact surface.

(4) Drop the head assembly from the specified height by means that ensure a smooth, instant release onto a rigidly supported flat horizontal steel plate which is 50.8 mm (2 in) thick and 610 mm (24 in) square. The impact surface shall be clean, dry and have a micro finish of not less than 203.2×10^{-6} mm (8 micro inches) (RMS) and not more than 2032.0×10^{-6} mm (80 micro inches) (RMS).

(5) Allow at least 2 hours between successive tests on the same head.

§572.173 Neck assembly and test procedure.

(a) The neck assembly for the purposes of this test consists of the assembly of components shown in drawing 420-2000 (incorporated by reference, see §572.170).

(b) When the head-neck assembly consisting of the head (drawing 420-1000), neck (drawing 420-2000), six-channel neck transducer (SA572-S11, included in drawing 420-0000), lower neck bracket assembly (drawing 420-2070), and either three uniaxial accelerometers (drawing SA572-S4, included in drawing 420-0000) or their mass equivalent installed in the head assembly as specified in drawing 420-1000 (all incorporated by reference, see §572.170), is tested according to the test procedure in paragraph (c) of this section, it shall have the following characteristics:

(1) *Flexion.* (i) Plane D, referenced in Figure T2, shall rotate in the direction of preimpact flight with respect to the